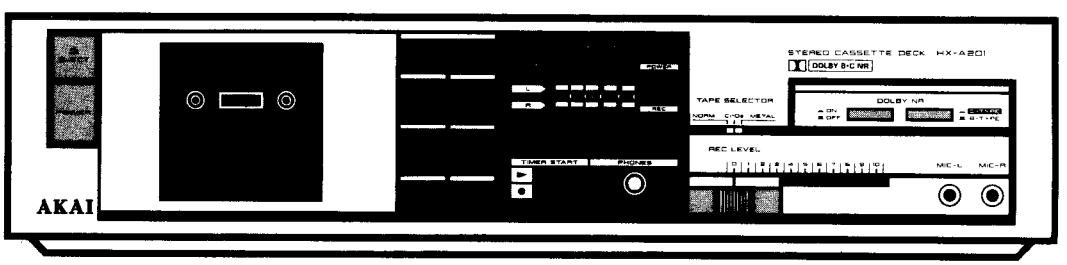
AKAI SERVICE MANUAL

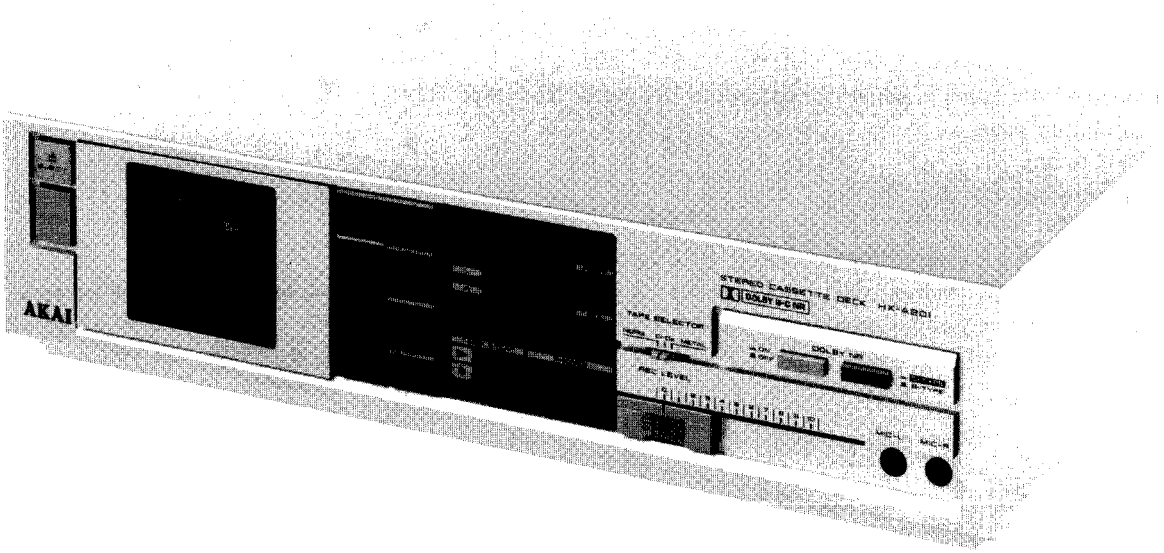


STEREO CASSETTE DECK

MODEL HX-A201

ABBREVIATIONS FOR SERVICE MANUAL
MODEL HX-A201

ABBREVIATION	EXPLANATION
ADJ	ADJust (ADJustment)
DIN	Deutsche Industrie Normen
FREQ.	FREQuency
IND	INDicator
LED	Light Emitting Diode
MIC	MICrophone
MPX	MultiPleX
PCB	Printed Circuit Board
S/N	Signal to Noise (Ratio)
SW	SWitch
TR	TRansistor



STEREO CASSETTE DECK

MODEL HX-A201

SECTION 1 SERVICE MANUAL 3
SECTION 2 PARTS LIST 11

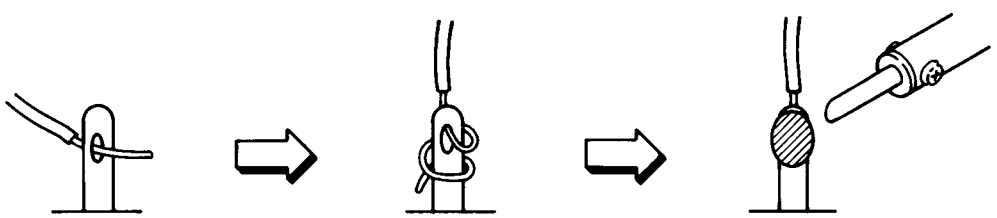
SAFETY INSTRUCTIONS

SAFETY CHECK AFTER SERVICING

Confirm the specified insulation resistance between power cord plug prongs and externally exposed parts of the set is greater than 10 Mohms, but for equipment with external antenna terminals (tuner, receiver, etc.) and is intended for [C] or [A], specified insulation resistance should be more than 2.2 Mohms (ground terminals, microphone jacks, headphone jacks. line-in-out jacks etc.)

PRECAUTIONS DURING SERVICING

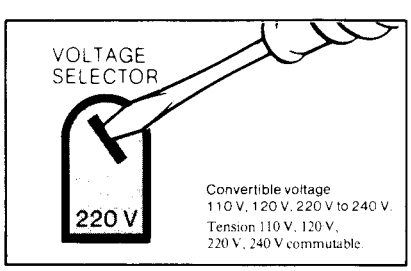
1. Parts identified by the ⚠ symbol parts are critical for safety.
   Replace only with parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with specified replacements.
   Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers (Insulating Barriers)
   4) Insulation sheets for transistors
   5) Plastic screws for fixing microswitch (especially in turntable)
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

VOLTAGE CONVERSION

Models for Canada, USA, Europe, UK and Australia are not equipped with this facility. Each machine is preset at the factory according to destination, but some machines can be set to 110V, 120V, 220V, or 240V as required.
If your machine's voltage can be converted:
Before connecting the power cord, turn the VOLTAGE SELECTOR located on the rear panel with a screwdriver until the correct voltage is indicated.



SECTION 1

SERVICE MANUAL

TABLE OF CONTENTS

I. SPECIFICATIONS 4
II. DISMANTLING OF UNIT 5
III. CONTROLS 6
IV. PRINCIPAL PARTS LOCATIONS 7
V. MECHANICAL ADJUSTMENT 8
5-1 PINCH ROLLER PRESSURE MEASUREMENT 8
5-2 WINDING TORQUE MEASUREMENT IN EACH MODE 8
5-3 TAPE SPEED ADJUSTMENT 8
5-4 REC/PB HEAD AZIMUTH ADJUSTMENT 8
5-5 JOINT REC ADJUSTMENT 8
VI. PRE-AMPLIFIER ADJUSTMENT 9
VII. PC BOARD TITLES AND IDENTIFICATION NUMBERS 10

For basic adjustments, measuring methods, and operating principles, refer to GENERAL TECHNICAL MANUAL.

I. SPECIFICATIONS

TRACK SYSTEM	4 tracks 2 channel stereo
TAPE	Phillips type cassette
HEADS	HD head for recording and playback x 1 Erase head x 1
MOTOR	Electronically speed controlled DC motor x 1
WOW & FLUTTER	0.05% WRMS (JIS), 0.12% (DIN 45 500)
FREQUENCY RESPONSE (at –20VU)	Normal 30 Hz to 15,000 Hz ±3 dB CrO_2 30 Hz to 16,000 Hz ±3 dB Metal 30 Hz to 17,000 Hz ±3 dB
S/N	56 dB (Metal) Dolby B type NR switch ON: Improves up to 5 dB at 1 kHz, 10 dB above 5 kHz Dolby C type NR switch ON: Improves up to 15 dB at 500 Hz, 20 dB at 1 kHz to 10 kHz
HARMONIC DISTORTION	Less than 0.7%
INPUT SENSITIVITY/IMPEDANCE	MIC 0.25 mV/5 kohms (Required microphone Impedance 600 ohms) LINE 70 mV/47 kohms DIN 2 mV/10 kohms (HX-A201-G)
OUTPUT SENSITIVITY/IMPEDANCE	LINE 380 mV/2.2 kohms DIN 380 mV/2.2 kohms (HX-A201-G) Headphones 0.3 mW/8 ohms
POWER REQUIREMENTS	120V, 60 Hz for USA & Canada 220V, 50 Hz for Europe except UK 240V, 50 Hz for UK & Australia 110/120/220/240V, 50/60 Hz convertible for other countries
DIMENSIONS	440 (W) x 110 (H) x 255 (D) mm (17.3 x 4.3 x 10.0 inches)
WEIGHT	3.2 kg (7.1 lbs)

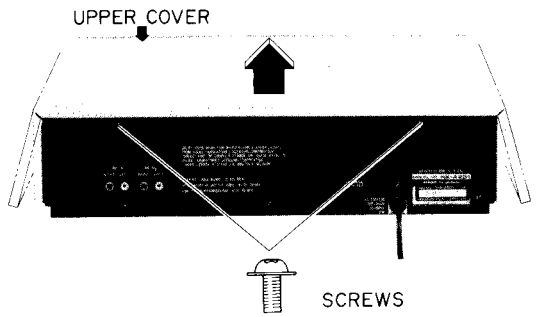
* For improvement purposes, specifications and design are subject to change without notice.

* Noise Reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

II. DISMANTLING OF UNIT

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.

3



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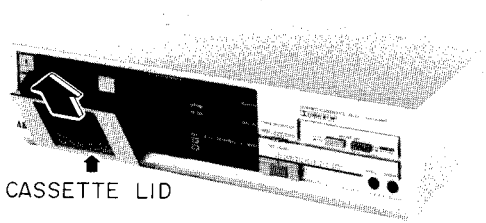

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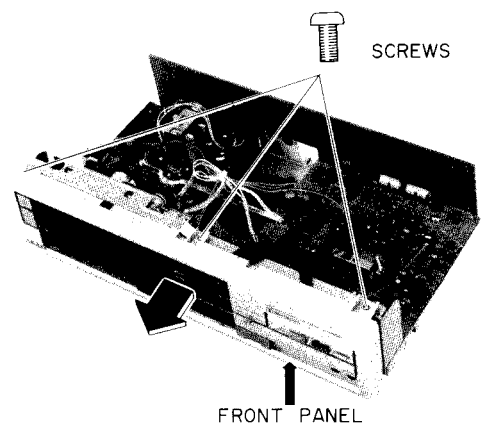
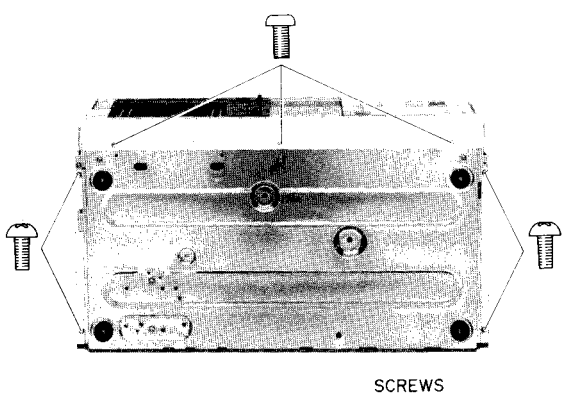
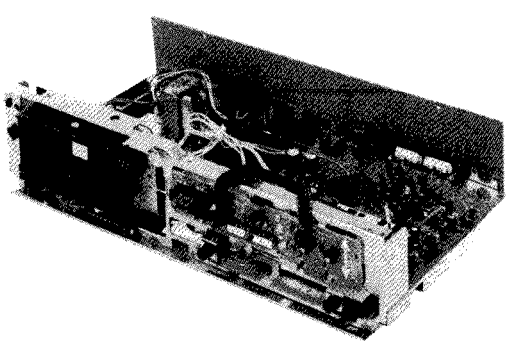


2



5



III. CONTROLS

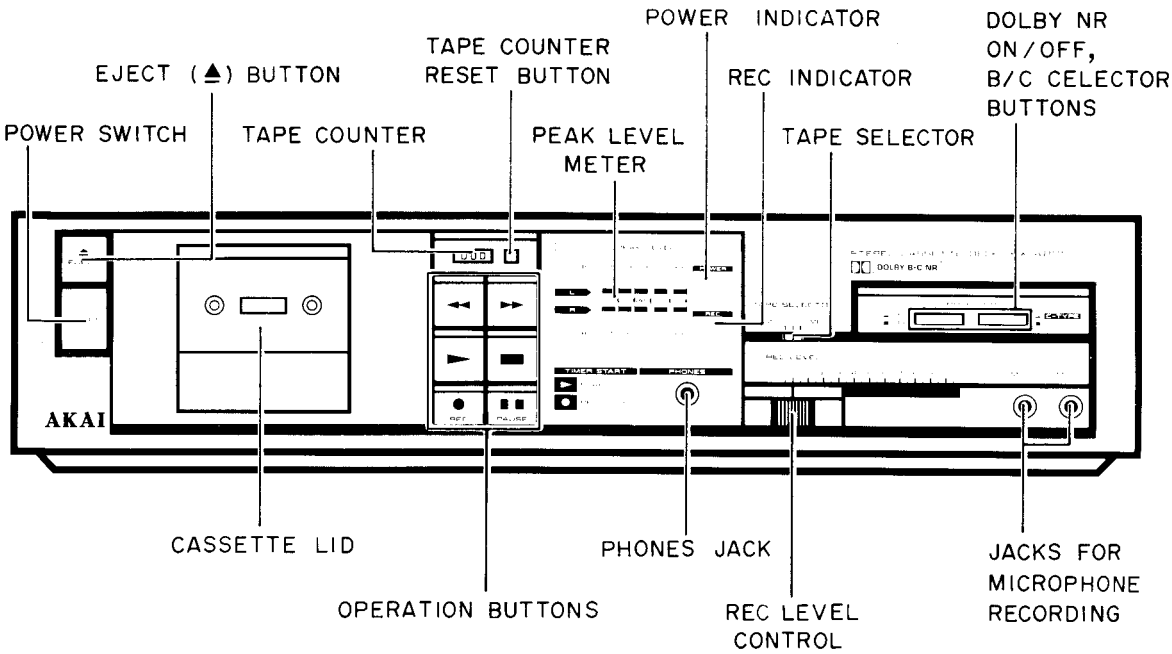


Fig. 3-1

IV. PRINCIPAL PARTS LOCATION

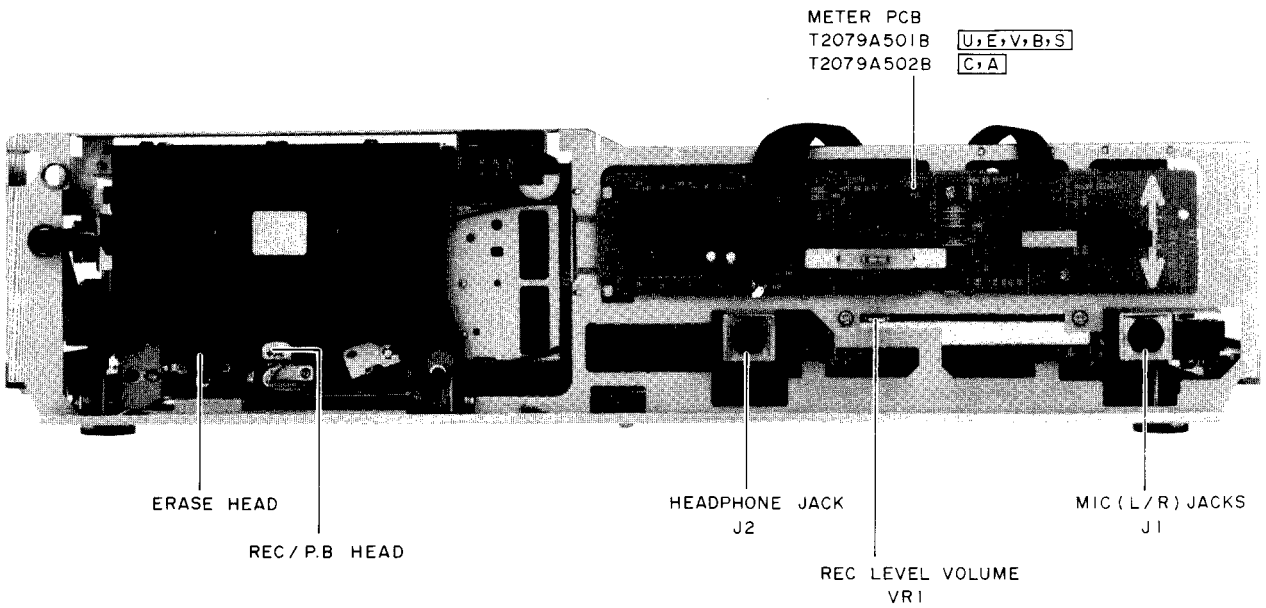


Fig. 4-1

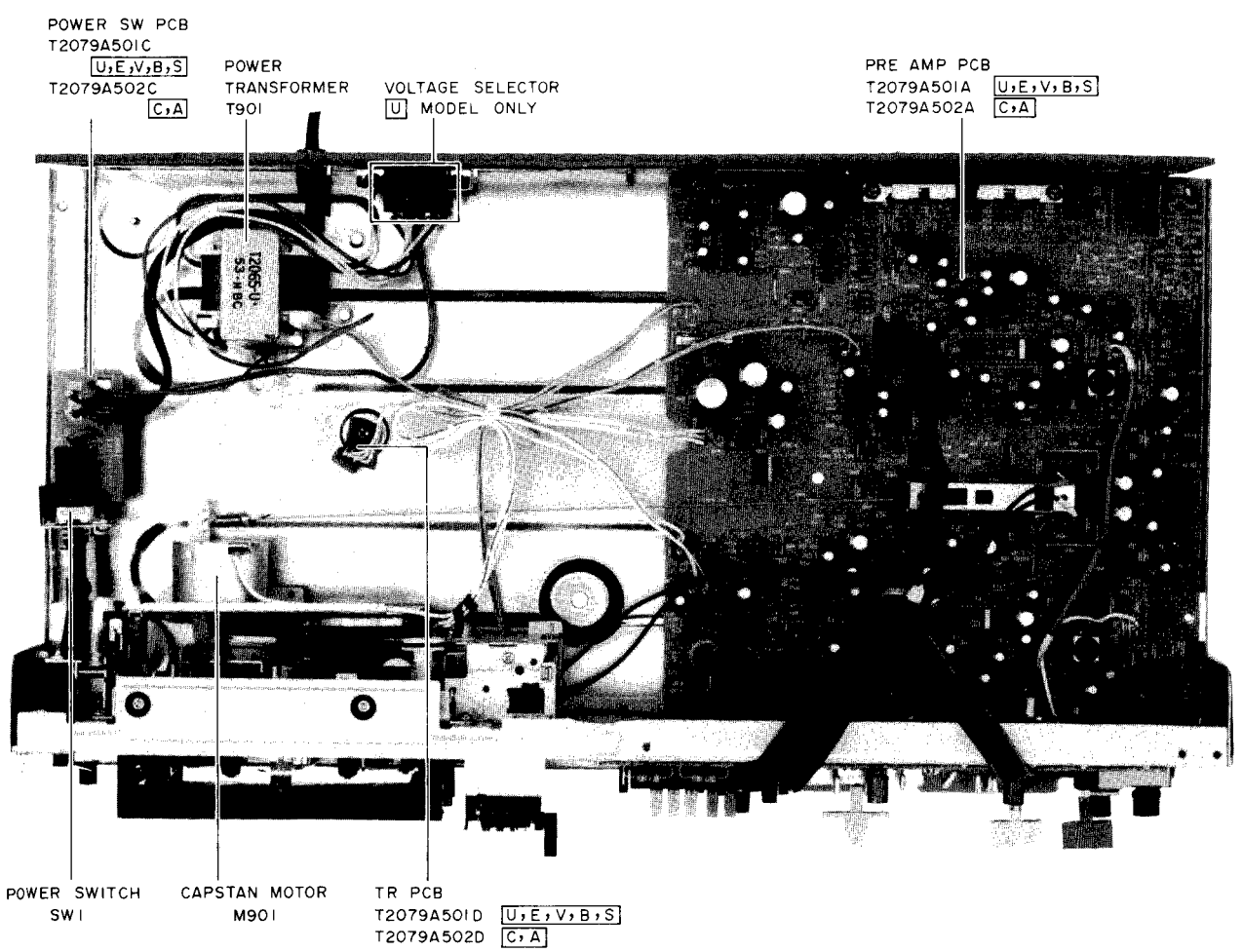


Fig. 4-2

V. MECHANICAL ADJUSTMENT

5-1 PINCH ROLLER PRESSURE MEASUREMENT

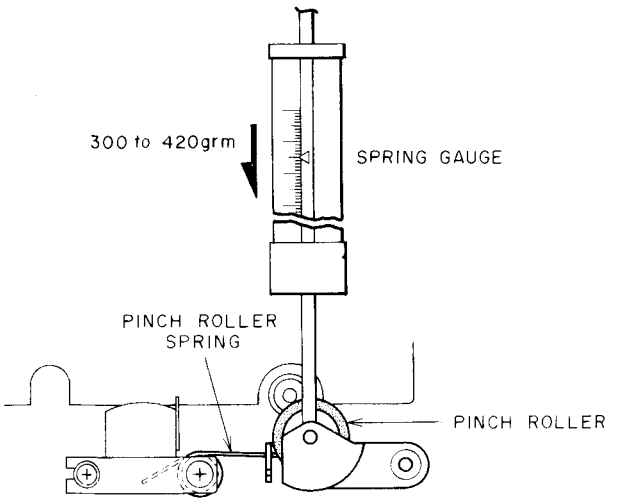


Fig. 5-1

Put in PLAY mode. Push pinch roller arm down with the spring gauge, push the pinch Roller 1 to 2 mm from the Capstan and release slowly. Read the spring gauge at the moment the pinch roller touches the capstan and begins to rotate. Specified contact pressure measurement of 300 to 420 grm. If there is no measurement obtained, Adjust or Replace the pinch Roller spring.

5-2 WINDING TORQUE MEASUREMENT IN EACH MODE

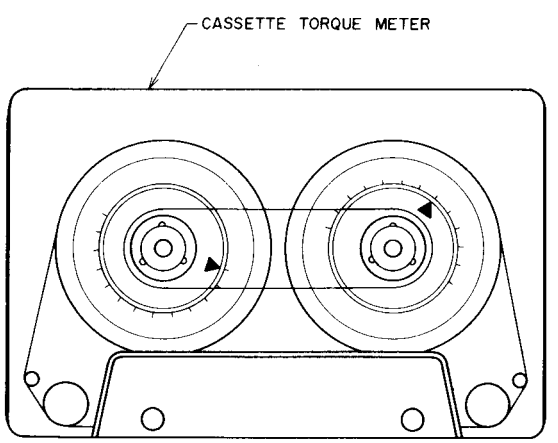


Fig. 5-2

Insert cassette torque meter (AJ-751179) and measure in each mode.

PLAY mode.

Take up Torque: 40 to 70 g-cm

Back tension torque: 1 to 6 g-cm

FAST FORWARD, REWIND mode

Take up Torque: 70 to 150 g-cm

5-3 TAPE SPEED ADJUSTMENT

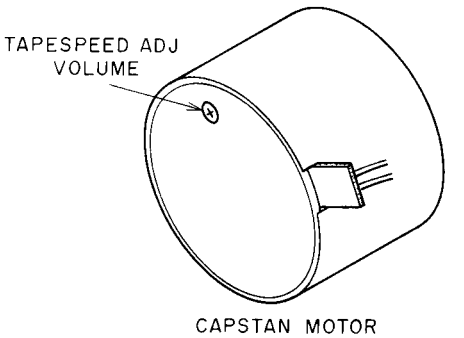


Fig. 5-3

Connect a frequency Counter to Line output terminals. Play Back a 3,150 Hz Tape Speed Test Tape (AT-751263) and adjust a Tape Speed Adjustment Volume (see Fig. 5-3) to obtain a tape speed of 3,150 ± 30 Hz.

5-4 REC/PB HEAD AZIMUTH ADJUSTMENT

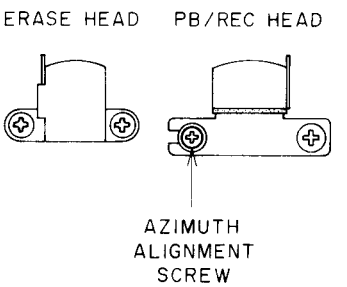


Fig. 5-4

Play Back a 10 kHz Azimuth Alignment tape (AT-750778) and Adjust the Azimuth Alignment Screw, until the output levels of both channels are maximum. After Adjustment, Paintlock the Azimuth Alignment Screw.

5-5 JOINT REC ADJUSTMENT

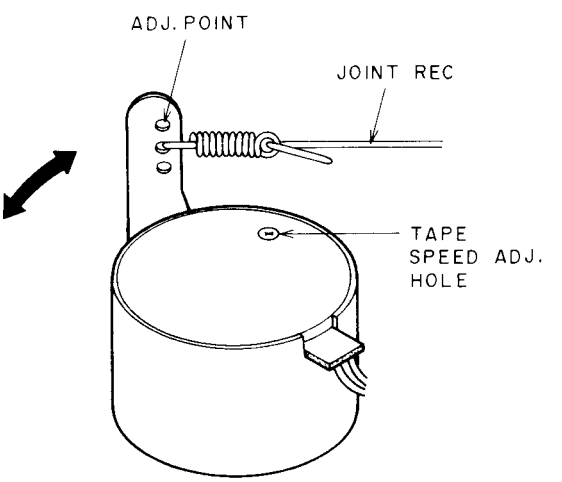


Fig. 5-5

Adjust adjustment point of JOINT REC so that SW1 is pulled completely at REC mode, it is released at PB mode.

VI. PRE-AMPLIFIER ADJUSTMENT

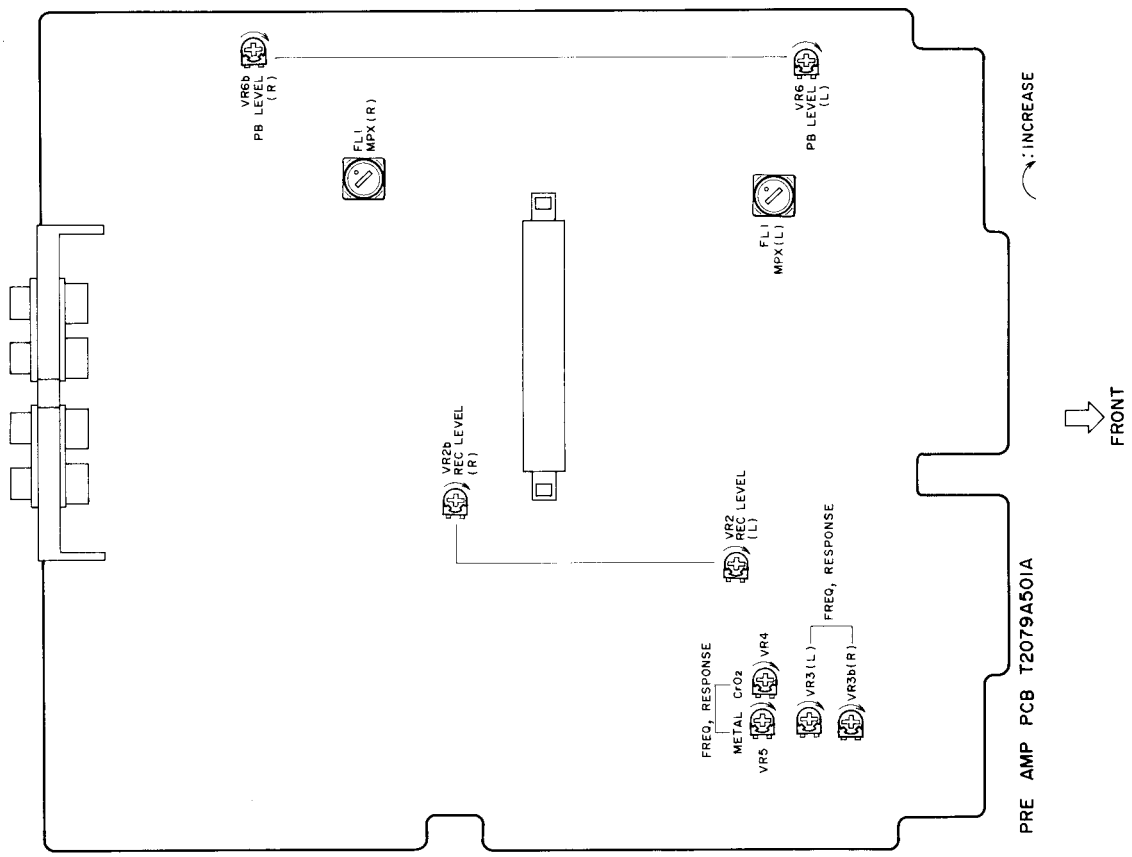


Fig. 6-1 Pre-Amp PCB ADJ Points

Step	Adjustment Item	Test Tape & Supply signal	Mode	Adjustment Part	Result	Remarks
1	PB LEVEL	315 Hz	PB	VR 6	−6.0 ± 0.2 dBm	
2	NORMAL POSITION FREQUENCY RESPONSE	NORMAL Blank Tape 1 kHz, 10 kHz −26.0 dBm	REC/PB	VR 3	1 kHz, 10 kHz −26.0 ± 0.3 dBm	
3	CrO_2 POSITION FREQUENCY RESPONSE	CrO_2 Blank Tape 1 kHz, 10 kHz −26.0 dBm	REC/PB	VR 4	1 kHz, 10 kHz −26.0 ± 0.8 dBm	
4	METAL POSITION FREQUENCY RESPONSE	METAL Blank Tape 1 kHz, 10 kHz −26.0 dBm	REC/PB	VR 5	1 kHz, 10 kHz −26.0 ± 0.8 dBm	
5	REC LEVEL	NORMAL Blank Tape 315 Hz, −6.0 dBm	REC/PB	VR 2	−6.0 ± 0.5 dBm	
6	MPX Filter	19 kHz	REC	FL 1	OUTPUT minimum	Less than −30 dBm

NOTE: 1. All adjustments are without Dolby.
2. Use the following cassette measuring tapes:
NORMAL TAPE : Maxell UDI C-60
CrO_2 TAPE : TDK SA C-60
METAL TAPE : TDK MA C-60

VII. PC BOARD TITLES AND IDENTIFICATION NUMBERS

PC Board Title	PC Board Number	Remarks
PRE-AMP PC BOARD	T2079A501A	U, E, V, B, S
PRE-AMP PC BOARD	T2079A502A	C, A
METER PC BOARD	T2079A501B	U, E, V, B, S
METER PC BOARD	T2079A502B	C, A
POWER SW PC BOARD	T2079A501C	U, E, V, B, S
POWER SW PC BOARD	T2079A502C	C, A
TR PC BOARD	T2079A501D	U, E, V, B, S
TR PC BOARD	T2079A502D	C, A

SECTION 2

PARTS LIST

TABLE OF CONTENTS

RECOMMENDED SPARE PARTS 13
1. MECHA BLOCK 14
2. PC BOARD BLOCK 16
3. PRE AMP PC BOARD 16
4. METER PC BOARD 16
5. POWER SW PC BOARD 16
6. TR PC BOARD 16
7. ASSEMBLY BLOCK 16
8. FINAL ASSEMBLY BLOCK 18
INDEX 19

Resistors and Capacitors which are not listed in this parts list, please refer to COMMON LIST FOR SERVICE PARTS.

ATTENTION

1. **When placing an order for parts, be sure to list the parts no. model no., and description of each part. If any of this information is omitted, there are instances in which parts cannot be shipped or the wrong parts will be delivered.**
2. **Please be careful not to make a mistake in the parts no. If the parts no. is in error, a part different from the one ordered may be delivered.**
3. **Because part numbers and part definitions and supply in the Preliminary Parts List may have been the subject of changes, please use this parts list for all future reference.**

HOW TO USE THIS PARTS LIST

1. This Parts List shows those parts which are considered necessary for repairs. Other parts, such as resistors and capacitors, are shown in the "Common List for Service Parts" from which these parts should be selected and parts.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the parts list

a) Mechanism Block

2. HEAD BASE BLOCK

REF. NO.	PART NO.	DESCRIPTION
2-1x	BH-T2023A320A	HEAD BASE BLOCK GX-F66R
2-2	HP-H2206A010A	HEAD R/P PR4-8FU C
2-3	ZS-477876	PAN20×03STL CMT
2-4	ZS-536488	BID20×08STL CMT
2-5	ZG-402895	CS ANGLE ADJUST SPRING

SP (Service Parts) Classification

A small "x" indicates the inability to show that particular part in the Photo or Illustration.

This number corresponds with the individual parts index number in that figure

This number corresponds with the Figure Number

b) P.C Board Block

6. SYS. CON. P C BOARD BLOCK

REF. NO.	PART NO.	DESCRIPTION
6-1	BA-T2034A070A	PC SYS CON BLK GX-F44R
6-IC1	EI-324536	IC HD14049BP
6-IC2	EI-336801	IC MB8841-564M
6-IC3	EI-331661	IC SN7405N
6-IC4	EI-336725	IC M54527P
6-TR1to4	ET-200985	TR 2SC2603 F,G
6-TR5to28	ET-554657	TR 2SA733A P,Q
6-D1	ED-318292	D SILICON H 1S2473T-77 T26
6-D2to4	ED-308952	D GERMA V 1K34A-LR F07
6-D5to10	ED-318292	D SILICON H 1S2473T-77 T26
6-X1	EI-318384	OSC X'TAL NC-18C 3.579545MHZ

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

5. The kind of part and its installation position can both be determined by the Part Number. To determine where a part number is listed, utilize the Parts Index at the end of the Parts List. It is necessary first of all to find the Part Number. This can be accomplished by using the Reference Number listed at the right of the part number in the Parts Index.

WARNING

⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS

AVERTISSEMENT

⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

RECOMMENDED SPARE PARTS

Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

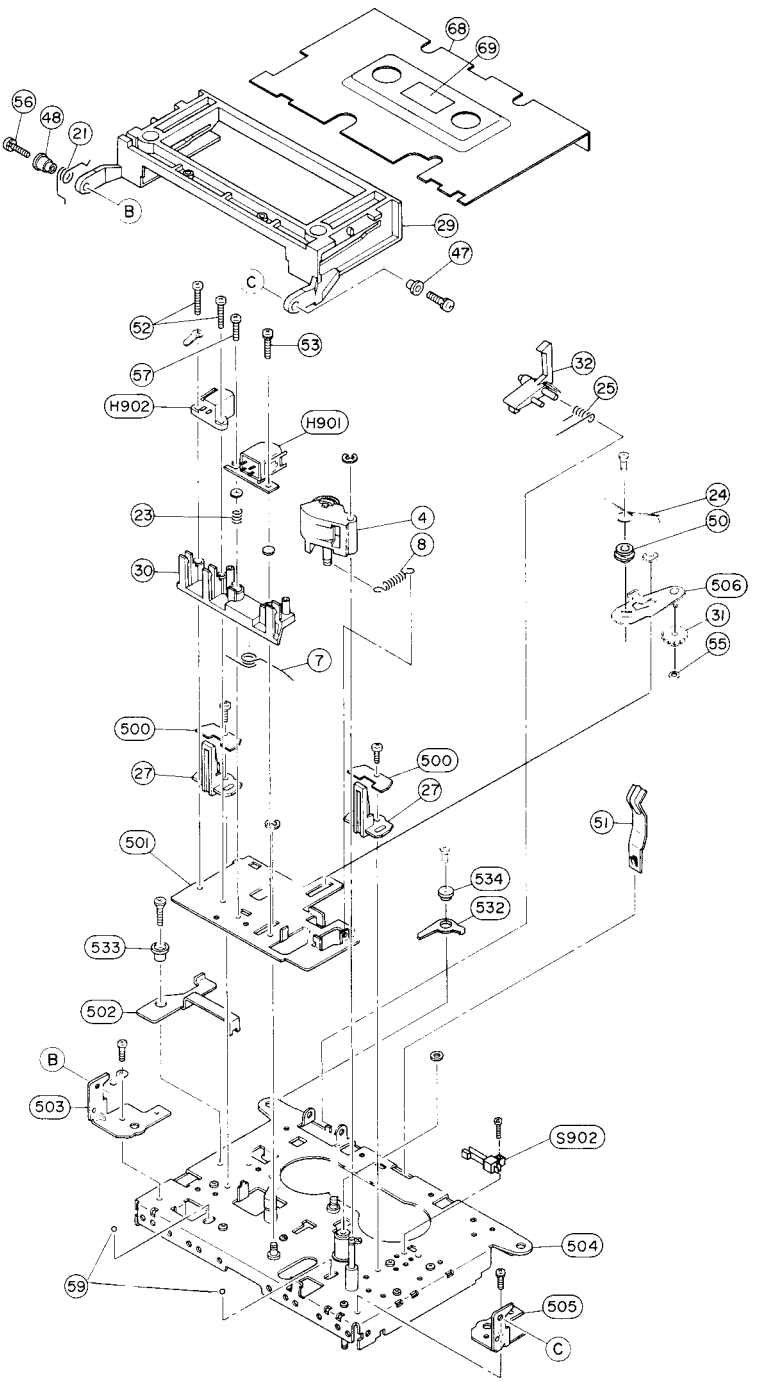
NO.		PART NO.	DESCRIPTION
1	N	BL-716238	PINCH ROLLER ASSY
2	N	BM-716312	⚠ MOTOR ASSY W/PULLEY EG-500AD-9B
3		BT-353299	⚠ TRANS POWER T2065(A,C)
4		BT-353301	⚠ TRANS POWER T2065(B,S)
5		BT-353300	⚠ TRANS POWER T2065(E,V)
6		BT-353298	⚠ TRANS POWER T2065(U)
7		BZ-716350	REEL BLK
8	N	ED-358085	D LED GL-9NG23 GRN
9		ED-351881	D LED GL-9PR23 RED
10	N	ED-358087	D LED SLP-175B-50 RED
11		ED-349617	D LED SLP-475B-50 YELLOW
12		ED-349662	D SILICON DS135E-FA6 100/1.0A
13		ED-301911	D SILICON H DS448
14		ED-301387	D ZENER H HZ12 B2
15		ED-331198	D ZENER H HZ3 A1
16	N	EF-359007	⚠ FUSE BET T 1.25A 250V [B]
17		EF-341264	⚠ FUSE GGS A 125V 1.60A [C,A]
18		EF-602550	⚠ FUSE SEMKO T 1.25A 250V [U,E,V,S]
19		EH-354528	FILTER DOLBY FX-100B
20		EI-349590	IC BA3280EC
21		EI-355595	IC HA12058NT
22		EI-353289	IC IR2E27A
23		EI-337228	IC M5218L0
24		EO-353311	COIL OSC 32-5021-12 100KHZ
25	N	ES-358581	⚠ SW PUSH J-U3065 01-1
26		ES-305733	⚠ SW SELECTOR HXW0131-260 01-4 [U]
27		ES-715649	SW LEAF LSA-1119E
28		ES-716265	SW LEAF LSA-1119F
29		ES-347966	SW PUSH ESB-649 01-2-2 N
30	N	ES-358084	SW SLIDE SSY063
31		ES-353310	SW SLIDE 01220126
32		ET-349979	⚠ TR 2SD794 P,Q,R
33		ET-348931	TR 2SB774 R,S,T
34		ET-331279	TR 2SC1843 P,F SNP
35		ET-308977	TR 2SC2274K F
36		ET-349705	TR 2SC2320 E,F,G
37		ET-349080	TR 2SC3382 S,T
38		ET-349081	TR 2SC3383 S,T
39		ET-349608	TR 2SC3383 T,U
40		ET-353316	TR 2SD313 D,E
41	N	EV-357619	R S-FIX H H0615C 3P 104
42	N	EV-358829	R S-FIX H H0615C 3P 223
43		EV-356583	R S-FIX H H0615C 3P 332
44	N	EV-356582	R S-FIX H H0615C 3P 473
45	N	EV-358082	VR SLIDE 60P2SVON A503×2
46		HE-337047	HEAD E HAJAB3040A C
47	N	HR-358778	HEAD R/P HAYSH4434A
48	N	MB-716288	BELT CAPSTAN
49	N	MB-358071	BELT 0.8×D54 CRHS65
50	N	MB-716266	BELT 1.0×40.0-60
51	N	MB-716282	BELT 1.2×50.0-65
52	N	MC-358780	COUNTER MK395-065
53	N	MI-716240	FLYWHEEL
54	N	MZ-716239	GEAR AUTO WORM ASSY 8RA
55	N	MZ-716281	GEAR CAPSTAN
56	N	MZ-716285	GEAR DRIVE
57	N	MZ-716287	GEAR RELAY PULLEY
58	N	MZ-716284	GEAR RF DRIVE
59	N	MZ-716271	GEAR TAKE-UP

"NOTE" N: New Parts

SYMBOL FOR DESTINATION

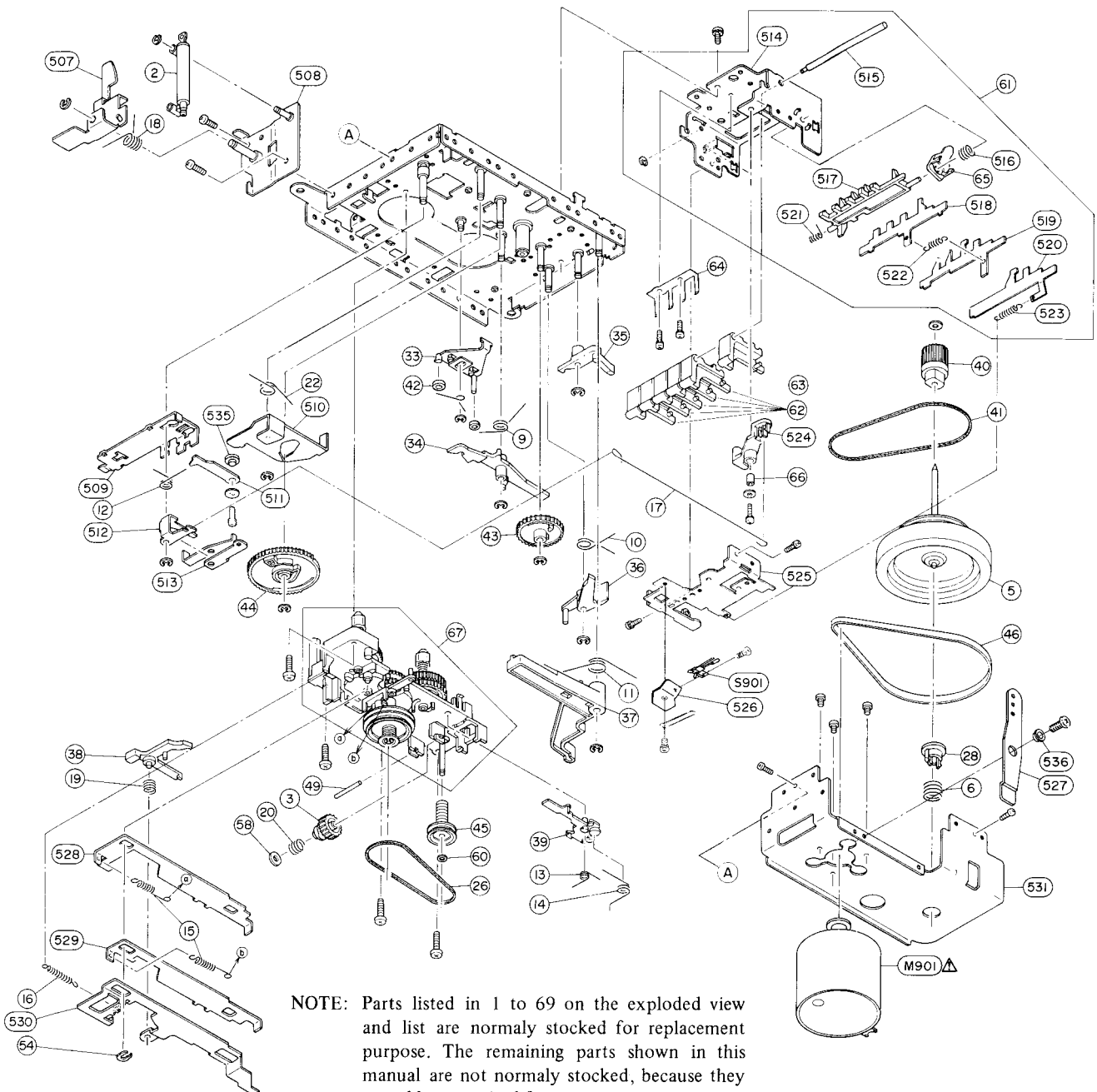
[A] : AAL (U.S.A)
[B] : UK (England)
[C] : CSA (Canada)
[E] : CEE (Europe)
[S] : SAA (Australia)
[U] : U/T (Universal Area)
[V] : VDE (West Germany)

MECHA BLOCK



1. MECHA BLOCK

REF. NO.	PART NO.	DESCRIPTION
		MECHA BLOCK
1-1	BB-T2079A300A	MECHA C-8F 34B (9V) BLK HX-A201
1-2	TC-716237	DAMPER ASSY
1-3	MZ-716239	GEAR AUTO WORM ASSY 8RA
1-4	BL-716238	PINCH ROLLER ASSY
1-5	MI-716240	FLYWHEEL
1-6	ZG-716241	SP CAPSTAN THRUST
1-7	ZG-716243	SP HEAD PANEL
1-8	ZG-716244	SP PINCH ROLLER
1-9	ZG-716245	SP RETURN
1-10	ZG-716246	SP RF TRIGGER
1-11	ZG-716247	SP RP TRIGGER
1-12	ZG-716248	SP LEVER REC
1-13	ZG-716249	SP STOP
1-14	ZG-716250	SP CANCEL
1-15	ZG-716251	SP RF
1-16	ZG-716252	SP LEVER AUTO
1-17	MZ-716254	WIRE REC
1-18	ZG-716255	SP CASE LOCK
1-19	ZG-716256	SP ARM AUTO
1-20	ZG-716257	SP AUTO WORM
1-21	ZG-716258	SP LID CASE
1-22	ZG-716259	SP ARM PLAY
1-23	ZG-716260	SP R/P HEAD
1-24	ZG-716261	SP TAKE-UP
1-25	ZG-716262	SP REC SENSER
1-26	MB-716266	BELT 1.0×40.0-60
1-27	TC-716267	GUIDE CASSETTE
1-28	MZ-716268	CAPSTAN THRUST
1-29	TC-716269	LID CASE
1-30	HZ-716270	HEAD BASE
1-31	MZ-716271	GEAR TAKE-UP
1-32	MZ-716272	REC SENSER
1-33	ML-716273	ARM BRAKE
1-34	ML-716274	LEVER RETURN
1-35	ML-716276	LEVER PAUSE TRIGGER
1-36	ML-716277	LEVER RF TRIGGER
1-37	ML-716278	LEVER RP TRIGGER
1-38	ML-716279	ARM AUTO



NOTE: Parts listed in 1 to 69 on the exploded view and list are normaly stocked for replacement purpose. The remaining parts shown in this manual are not normaly stocked, because they are seldom required for routine service.

REF. NO.	PART NO.	DESCRIPTION
1-39	ML-716280	ARM CANCEL
1-40	MZ-716281	GEAR CAPSTAN
1-41	MB-716282	BELT 1.2×50.0-65
1-42	MB-716283	BRAKE RUBBER
1-43	MZ-716284	GEAR RF DRIVE
1-44	MZ-716285	GEAR DRIVE
1-45	MZ-716287	GEAR RELAY PULLEY
1-46	MB-716288	BELT CAPSTAN
1-47	ZW-716289	COLLAR CASE (R)
1-48	ZW-716290	COLLAR CASE (L)
1-49	MS-716291	SHAFT 2.0×19.0
1-50	ZW-716292	COLLAR
1-51	ZG-716293	SP CASSETTE HOLDER
1-52	ZS-716294	BID20×014STL CMT
1-53	ZS-716295	PAN20×014STL CMT SW
1-54	ZW-716296	RING G G-2.5
1-55	ZW-716298	PW17×032×025 PSL CUT
1-56	ZS-716299	PAN30×12STL CMT SW
1-57	ZS-716300	BID20×013STL CMT
1-58	ZW-716301	PW20×080×025 PSL

REF. NO.	PART NO.	DESCRIPTION
1-59	MV-716302	BALL M3
1-60	ZW-716303	PW17×032×025 PSL CUT
1-61	SB-716304	BUTTON OPERATION ASSY
1-62	ML-716305	LEVER KEY
1-63	ML-716304	LEVER PAUSE KEY
1-64	ZG-716307	SP LEVER KEY
1-65	MI-716309	CAM PAUSE
1-66	ML-716311	LEVER REC
1-67	BZ-716350	REEL BLK
1-M901	BM-716312	⚠ MOTOR ASSY W/PULLEY EG-500AD-9B
1-S901	ES-715649	SW LEAF LSA-1119E
1-S902	ES-716265	SW LEAF LSA-1119F
1-H901	HR-358778	HEAD R/P HAYSH4434A
1-H902	HE-337047	HEAD E HAJAB3040A C
	ASSEMBLY BLOCK	
1-68	BD-358779	LID DECORATION
1-69	SZ-358510	REFRECTER

2. PC BOARD BLOCK

REF. NO.	PART NO.	DESCRIPTION
2-1A	BA-T2079A020A	PC PRE AMP BLK HX-A201(U)
2-1B	BA-T2079A020B	PC PRE AMP BLK HX-A201(C,A)
2-1C	BA-T2079A020C	PC PRE AMP BLK HX-A201(E,B,S)
2-1D	BA-T2079A020D	PC PRE AMP BLK HX-A201(V)

NOTE: PC PRE AMP BLK consists of following PC BOARDS.
- PRE AMP PC BOARD
- METER PC BOARD
- POWER SW PC BOARD
- TR PC BOARD

3. PRE AMP PC BOARD

PRE. NO.	PART NO.	DESCRIPTION
	PRE AMP PC BOARD	
3-IC1	EI-349590	IC BA3280EC
3-IC2	EI-355595	IC HA12058NT
3-IC3	EI-337228	IC M5218L0
3-TR1	ET-349608	⚠ TR 2SC3383 T,U
3-TR2	ET-349705	TR 2SC2320 E,F,G
3-TR3	ET-348931	TR 2SB774 R,S,T
3-TR4	ET-349705	TR 2SC2320 E,F,G
3-TR5,6	ET-349608	TR 2SC3383 T,U
3-TR7	ET-353316	TR 2SD313 D,E
3-TR8,9	ET-349705	TR 2SC2320 E,F,G
3-TR10,11	ET-308977	TR 2SC2274K F
3-TR12	ET-349080	TR 2SC3382 S,T
3-TR13,14	ET-349081	TR 2SC3383 S,T
3-TR15	ET-331279	TR 2SC1843 P,F SNP [V]
3-D1,2	ED-349662	⚠ D SILICON DS135E-FA6 100/1.0A
3-D3	ED-310387	D ZENER H HZ12 B2
3-D4,5	ED-349662	D SILICON DS135E-FA6 100/1.0A
3-D6to8	ED-301911	D SILICON H DS448
3-D9	ED-331198	D ZENER H HZ3 A1
3-SW1	ES-353310	SW SLIDE 01220126
3-VR1	EV-358082	VR SLIDE 60P2SVON A503×2
3-VR2	EV-358829	R S-FIX H H0615C 3P 223
3-VR3	EV-357619	R S-FIX H H0615C 3P 104
3-VR4	EV-358829	R S-FIX H H0615C 3P 223
3-VR5	EV-356583	R S-FIX H H0615C 3P 332
3-VR6	EV-356582	R S-FIX H H0615C 3P 473
3-FL1	EH-354528	FILTER DOLBY FX-100B
3-FL2	FO-337044	COIL TUN 1 102AZ-005
3-FL3	EO-315758	COIL TUN 1 100Z-431 100.00KHZ
3-T1	EO-353311	COIL OSC 32-5021-12 100KHZ
3-C1	EC-316187	C EC V CUT SM 102M 16DC
3-C2	EC-416186	C EC V CUT SM 222M 16.0DC
3-C5	EC-316187	C EC V CUT SM 102M 16DC
3-C14	EC-345817	C PP V F10 APH 272J 630DC
3-C15	EC-347228	C MC V F05 FM 470J 500DC
3-C48	EC-334071	C STY V F05 CQ09S 391J 50DC
3-C50	EC-516723	C STY V 271K 50DC
3-J1	EJ-357732	PHONE J HLJ0527-3030
3-J2	EJ-355012	PHONE J 3P HLJ0541-010 6.3
3-J3	EJ-347664	PIN J YKC21-5053 P 4P
3-J4	EJ-358083	DIN.J TCS4654-01-1211 [V]
	ASSEMBLY BLOCK	
3-F1A	EF-602550	⚠ FUSE SEMKO T 1.25A 250V [U,E,V,S]
3-F1B	EF-341264	⚠ FUSE GGS A 125V 1.60A[C,A]
3-F1C	EF-359007	⚠ FUSE BET T 1.25A 250V [B]

4. METER PC BOARD

REF. NO.	PART NO.	DESCRIPTION
4-IC1	EI-353289	IC IR2E27A
4-D1to3	ED-358085	D LED GL-9NG23 GRN
4-D4,5	ED-351881	D LED GL-9PR23 RED
4-D6	ED-349617	D LED SLP-475B-50 YELLOW
4-D7	ED-358087	D LED SLP-175B-50 RED
4-SW1,2	ES-347966	SW PUSH ESB-649 01-2-2 N
4-SW3	ES-358084	SW SLIDE SSY063
4-FL1	EO-347162	COIL FIX 1 L-8 103J
4-R1	ER-315389	⚠ R CB H S15 FS RDS 1/2W 470J

5. POWER SW PC BOARD

REF. NO.	PART NO.	DESCRIPTION
5-SW1	ES-358581	⚠ SW PUSH J-U3065 01-1
5-C1A	EC-320548	⚠ C CE V F 103Z 250AC [U,C,A]
5-C1B	EC-338411	⚠ C CE V FZ 103P 400AC [E,B,S,V]

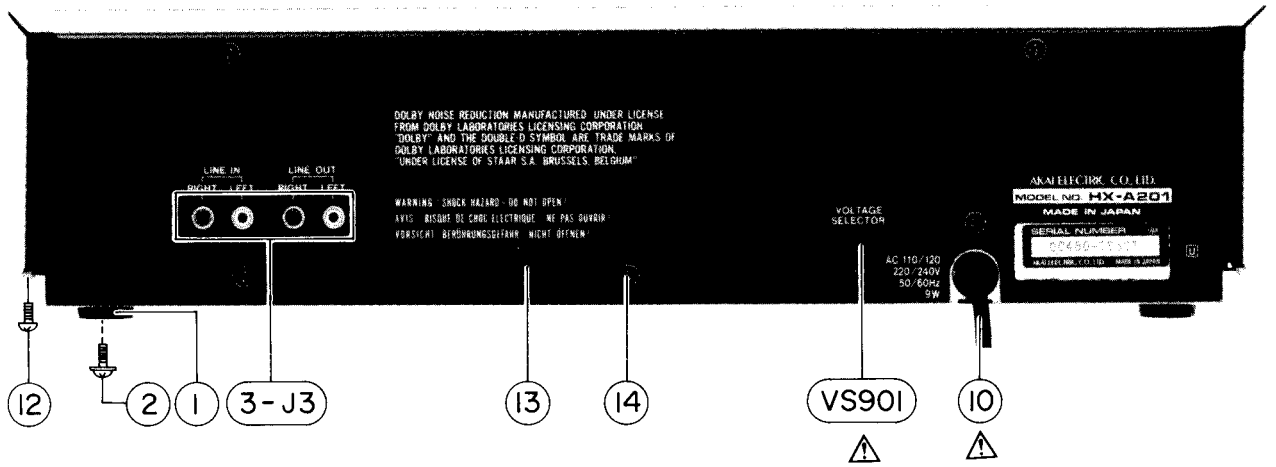
6. TR PC BOARD

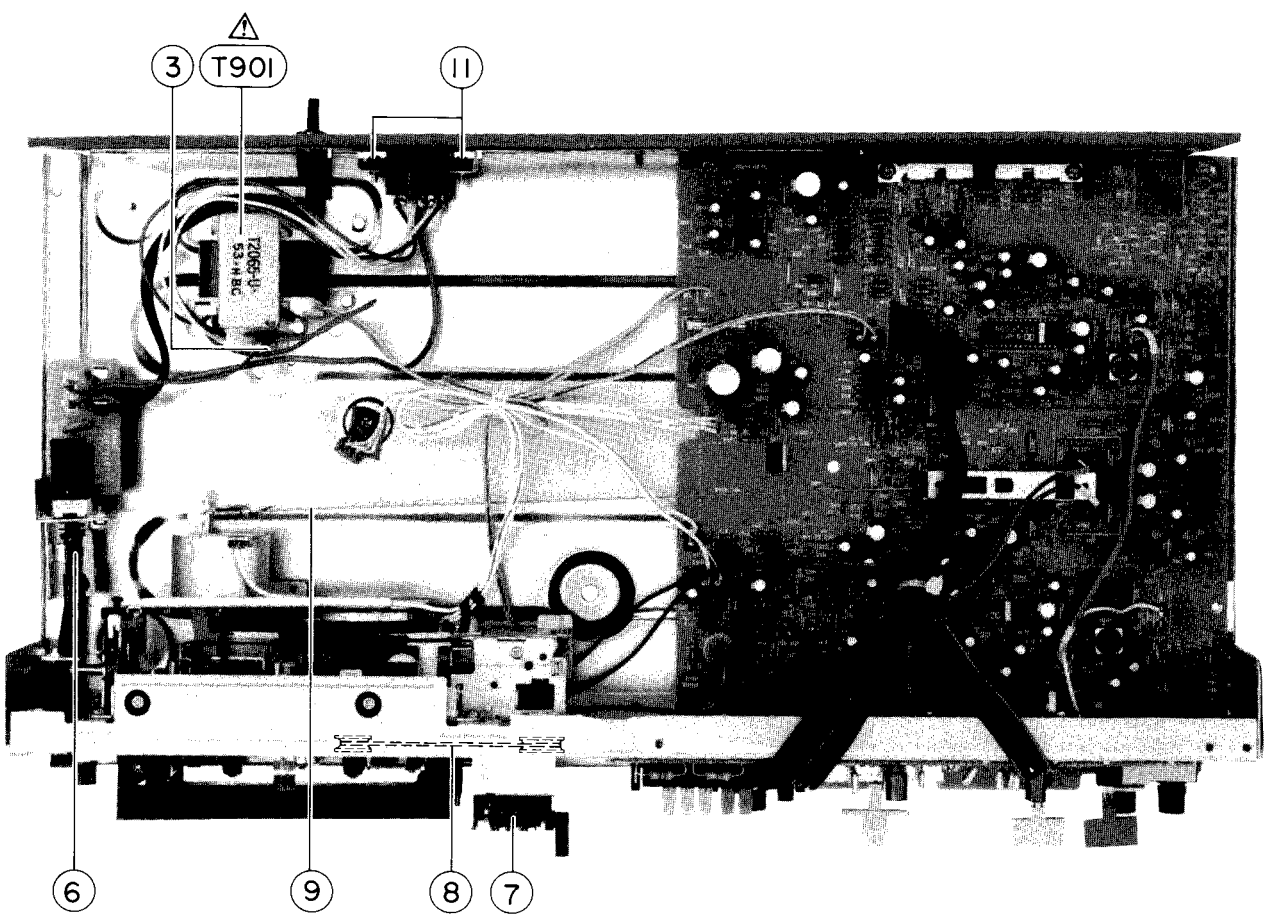
REF. NO.	PART NO.	DESCRIPTION
6-TR1	ET-349979	⚠ TR 2SD794 P,Q,R
6-1	EZ-200473	SILICON RUBBER SHEET TC-30

7. ASSEMBLY BLOCK

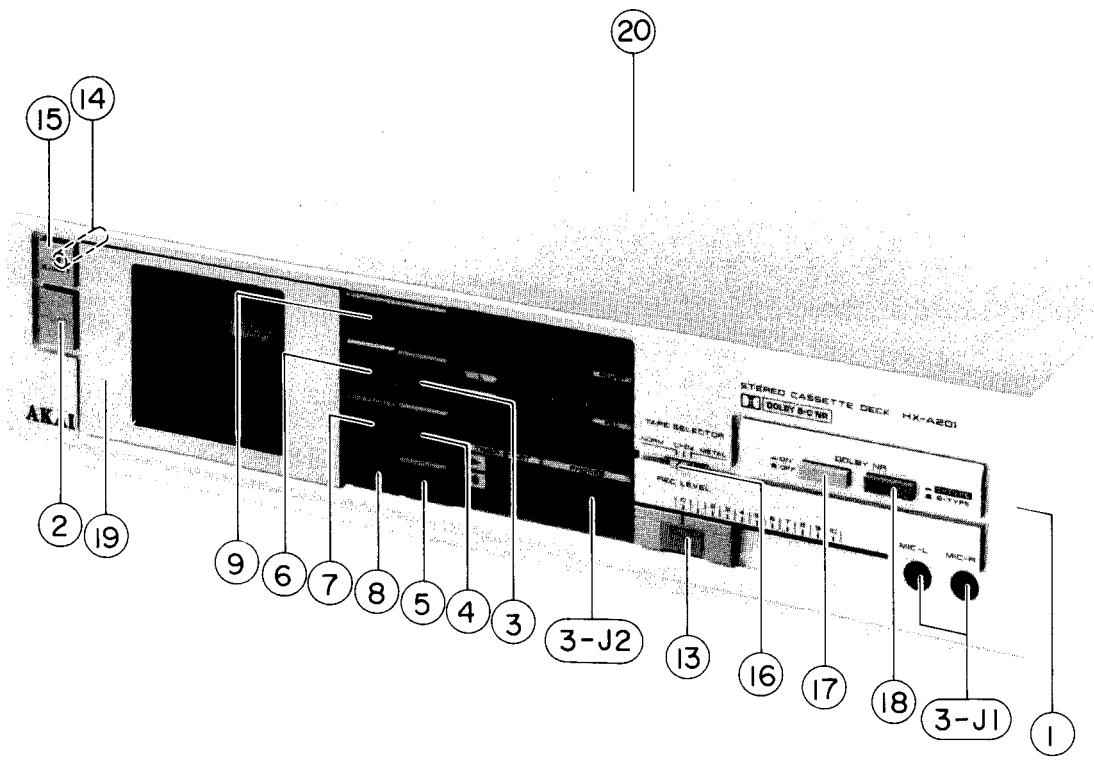
REF. NO.	PART NO.	DESCRIPTION
	ASSEMBLY BLOCK	
7-1	SA-349332	FOOT
7-2	ZS-354869	ST BR30×06STL CMT C080
7-3	ZS-304022	ST PAN40×06STL CMT
7-4x	ZW-273914	SW40
7-5x	ZW-698308	RV NYL30×055 BL [V] [J4 FIX]
7-6	TC-358065	JOINT POWER
7-7	MC-358780	COUNTER MK395-065
7-8	MB-358071	BELT 0.8×D54 CRH565
7-9	TC-358081	JOINT REC
7-10A	EW-347683	⚠ AC CORD 2 CORES VM0129, VFF-CB U/T [U]
7-10B	EW-347607	⚠ AC CORD 2 CORES VM0238, SPT-1CB UC [C,A]
7-10C	EW-347682	⚠ AC CORD 2 CORES VM0364, FC3097-CB EV [E,V]
7-10D	EW-347680	⚠ AC CORD 2 CORES LCFL2×0.75-CB B [B]
7-10E	EW-347681	⚠ AC CORD 2 CORES VM0436, FC3093-CB S [S]
7-11	ZS-348375	ST BR30×08STL CMT [U]
7-12	ZS-320906	ST BR30×06STL CMT
7-13A	SP-358073G	PANEL REAR HX-A201(U)
7-13B	SP-358073H	PANEL REAR HX-A201(C,A)
7-13C	SP-358073J	PANEL REAR HX-A201(E)
7-13D	SP-358073K	PANEL REAR HX-A201(V)
7-13E	SP-358073L	PANEL REAR HX-A201(B)
7-13F	SP-358073M	PANEL REAR HX-A201(S)
7-14	ZS-358803	ST BR30×08STL BNI C080
7-15x	EW-344151	CORD RR-61A PIN×2-PIN×2
7-T901A	BT-353298	⚠ TRANS POWER T2065(U)
7-T901B	BT-353299	⚠ TRANS POWER T2065(A,C)
7-T901C	BT-353300	⚠ TRANS POWER T2065(E,V)
7-T901D	BT-353301	⚠ TRANS POWER T2065(B,S)
7-VS901	ES-305733	⚠ SW SELECTOR HXW0131-260 01-4 [U]
	PRE AMP PC BOARD	
3-J3	EJ-347664	PIN J YKC21-5053 P 4P

ASSEMBLY BLOCK


DOLBY NOISE REDUCTION MANUFACTURED UNDER LICENSE FROM DOLBY LABORATORIES LICENSING CORPORATION "DOLBY" AND THE DOUBLE-D SYMBOL ARE TRADE MARKS OF DOLBY LABORATORIES LICENSING CORPORATION. "UNDER LICENSE OF STAAR S.A. BRUSSELS, BELGIUM"
LINE IN
LINE OUT
RIGHT LEFT
RIGHT LEFT
WARNING: SHOCK HAZARD - DO NOT OPEN
AVIS: RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR
VORSICHT: BERÜHRUNGSGEFAHR - NICHT ÖFFNEN
VOLTAGE SELECTOR
AC 110/120 220/240V 50/60Hz 9W
AKAI ELECTRIC CO. LTD.
MODEL NO. HX-A201
MADE IN JAPAN
SERIAL NUMBER
12
2
1
3-J3
13
14
VS901
10



FINAL ASSEMBLY BLOCK



8. FINAL ASSEMBLY BLOCK

REF. NO.	PART NO.	DESCRIPTION
	PANEL FRONT BLOCK	
8-1	BD-T2079A030A	PANEL FRONT BLK HX-A201
8-1B	BD-T2079A030B	PANEL FRONT BLK HX-A201-B
8-2	SK-343017C	KNOB POWER (2)
8-2B	SK-343017F	KNOB POWER-B
8-3	SK-358074A	KNOB OPERATION FF
8-3B	SK-358074B	KNOB OPERATION FF-B
8-4	SK-358074C	KNOB OPERATION STOP
8-4B	SK-358074D	KNOB OPERATION STOP-B
8-5	SK-358074E	KNOB OPERATION PAUSE
8-5B	SK-358074F	KNOB OPERATION PAUSE-B
8-6	SK-358076A	KNOB OPERATION REW
8-6B	SK-358076B	KNOB OPERATION REW-B
8-7	SK-358076C	KNOB OPERATION PLAY
8-7B	SK-358076D	KNOB OPERATION PLAY-B
8-8	SK-358076E	KNOB OPERATION REC
8-8B	SK-358076F	KNOB OPERATION REC-B
8-9	BC-358067A	COVER COUNTER
8-9B	BC-358067B	COVER COUNTER-B
8-10x	ZG-358078	SP PUSH OPERATION [FF,STOP,PAUSE,REW,PLAY,REC]
8-11x	ZW-340648	RING CS190STL PKR [SP PUSH OPERATION FIX]
	FINAL ASSEMBLY BLOCK	
8-12	ZS-358936	ST BID30×06STL CMT [PANEL FRONT FIX]

REF. NO.	PART NO.	DESCRIPTION
8-13	SK-358474D	KNOB (D-4)
8-13B	SK-358474C	KNOB (D-3)
8-14	TC-358068	JOINT EJECT
8-15	SK-357584B	KNOB EJECT (2)
8-15B	SK-357584C	KNOB EJECT (3)
8-16	SK-358066A	KNOB SLIDE
8-16B	SK-358066B	KNOB SLIDE-B
8-17	SK-358063A	KNOB PUSH
8-17B	SK-358063B	KNOB PUSH-B
8-18	SK-358063C	KNOB PUSH-C
8-19	BD-358072A	LID
8-19B	BD-358072B	LID-B
8-20	SP-358061A	COVER UPPER
8-20B	SP-358061B	COVER UPPER-B
	PRE AMP PC BOARD	
3-J1	EJ-357732	PHONE J HLJ0527-3030
3-J2	EJ-355012	PHONE J 3P HLJ0541-010 6.3

NOTE: PANEL FRONT BLK consists of 8-2 to 8-11x.

SYMBOL FOR COLOR VARIATION

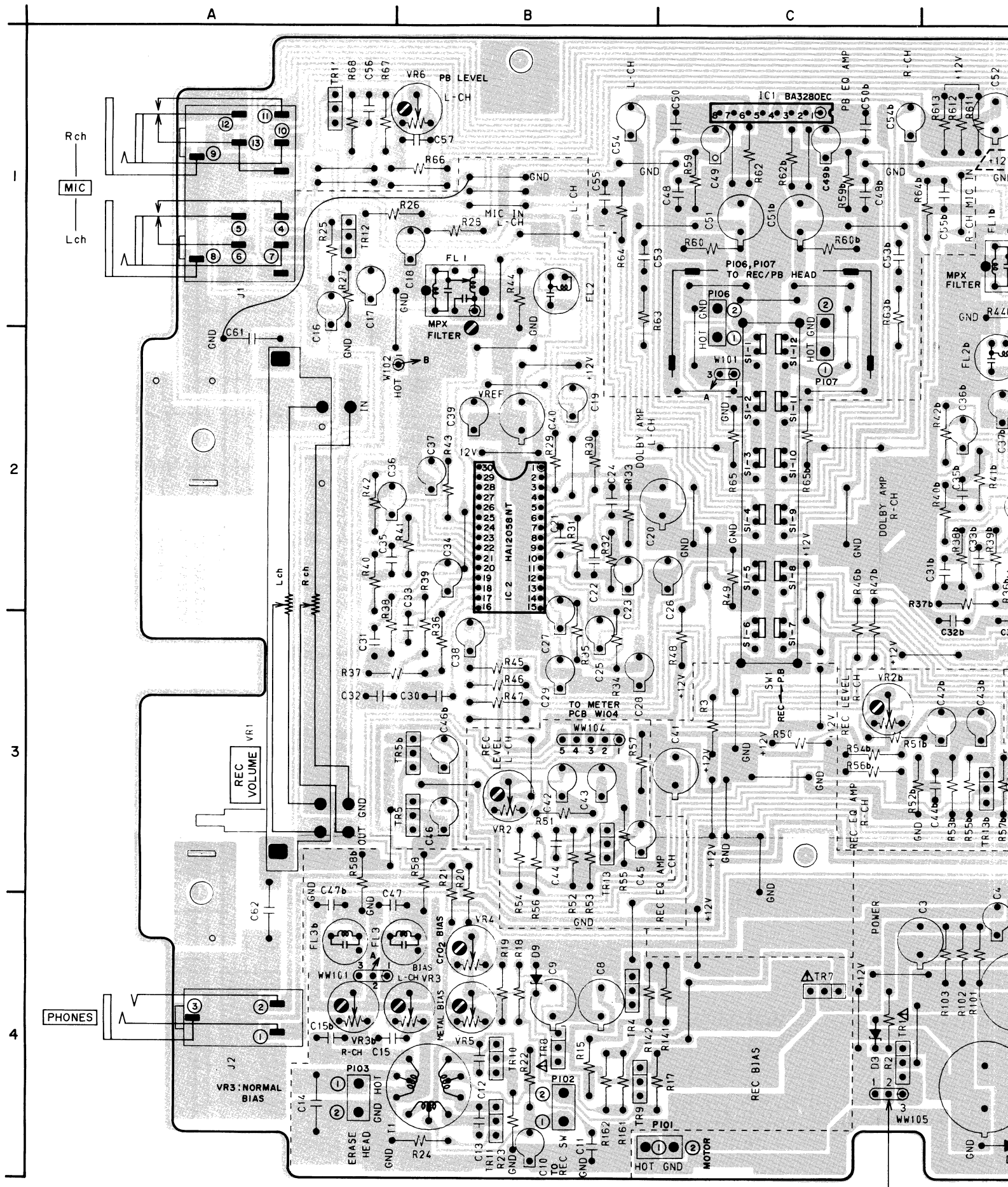
NON : STANDARD COLOR
B or BL : BLACK

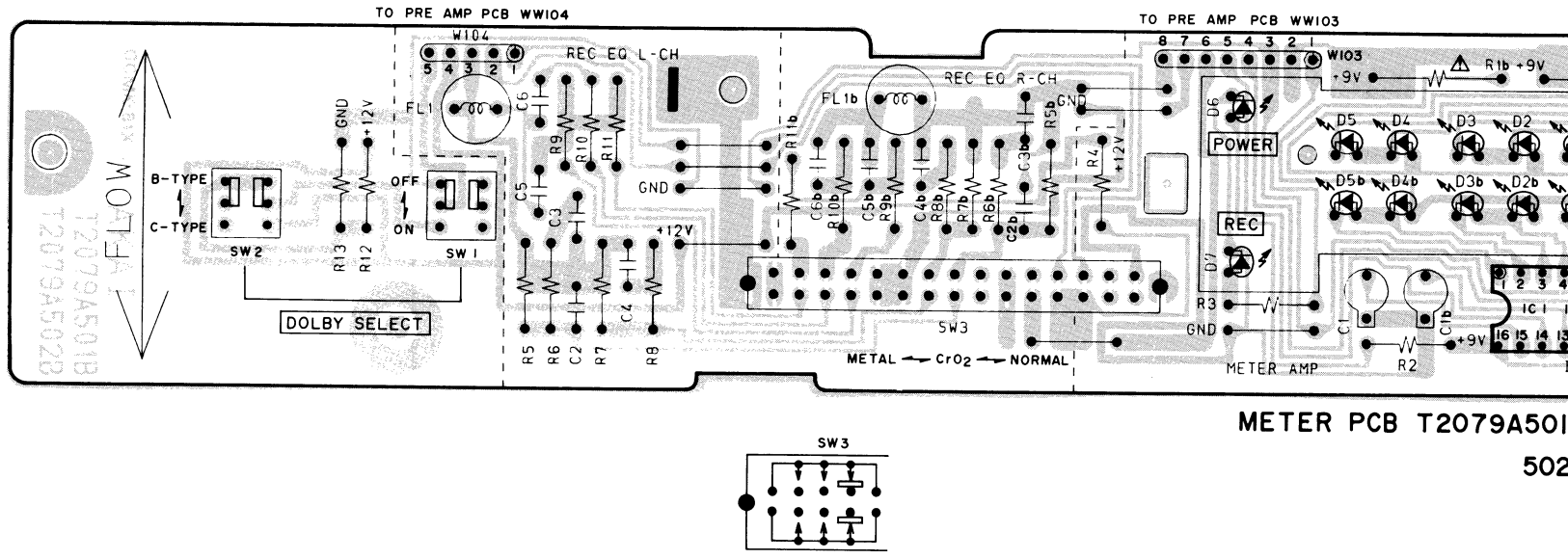
INDEX

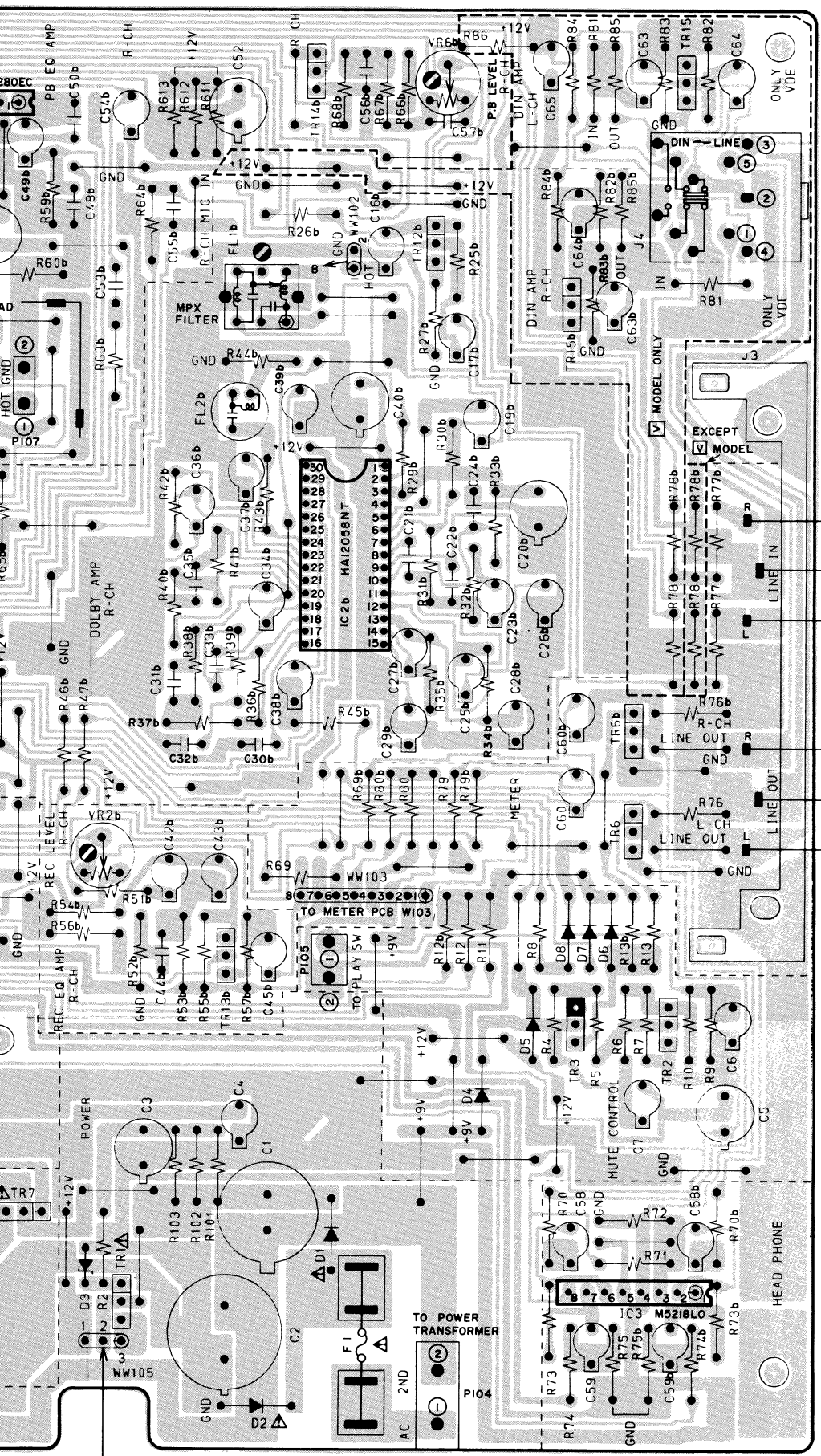
PART NO.	REF. NO.	PART NO.	REF. NO.	PART NO.	REF. No.	PART NO.	REF. NO.
BA-T2079A020A	2-1A	ER-315389	4-R1	MV-716302	1-59	ZG-716251	1-15
BA-T2079A020B	2-1B	ES-305733	7-VS901	MZ-716239	1-3	ZG-716252	1-16
BA-T2079A020C	2-1C	ES-347966	4-SW1	MZ-716254	1-17	ZG-716255	1-18
BA-T2079A020D	2-1D	ES-347966	4-SW2	MZ-716268	1-28	ZG-716256	1-19
BB-T2079A300A	1-1	ES-353310	3-SW1	MZ-716271	1-31	ZG-716257	1-20
BC-358067A	8-9	ES-358084	4-SW3	MZ-716272	1-32	ZG-716258	1-21
BC-358067B	8-9B	ES-358581	5-SW1	MZ-716281	1-40	ZG-716259	1-22
BD-T2079A030A	8-1	ES-715649	1-S901	MZ-716284	1-43	ZG-716260	1-23
BD-T2079A030B	8-1B	ES-716265	1-S902	MZ-716285	1-44	ZG-716261	1-24
BD-358072A	8-19	ET-308977	3-TR10	MZ-716287	1-45	ZG-716262	1-25
BD-358072B	8-19B	ET-308977	3-TR11	SA-349332	7-1	ZG-716293	1-51
BD-358779	1-68	ET-331279	3-TR15	SB-716304	1-61	ZG-716307	1-64
BL-716238	1-4	ET-348931	3-TR3	SK-343017C	8-2	ZS-304022	7-3
BM-716312	1-M901	ET-349080	3-TR12	SK-343017F	8-2B	ZS-320906	7-12
BT-353298	7-T901A	ET-349081	3-TR13	SK-357584B	8-15	ZS-348375	7-11
BT-353299	7-T901B	ET-349081	3-TR14	SK-357584C	8-15B	ZS-354869	7-2
BT-353300	7-T901C	ET-349608	3-TR1	SK-358063A	8-17	ZS-358803	7-14
BT-353301	7-T901D	ET-349608	3-TR5	SK-358063B	8-17B	ZS-358936	8-12
BZ-716350	1-67	ET-349608	3-TR6	SK-358063C	8-18	ZS-716294	1-52
EC-316186	3-C2	ET-349705	3-TR2	SK-358066A	8-16	ZS-716295	1-53
EC-316187	3-C1	ET-349705	3-TR4	SK-358066B	8-16B	ZS-716299	1-56
EC-316187	3-C5	ET-349705	3-TR8	SK-358074A	8-3	ZS-716300	1-57
EC-320548	5-C1A	ET-349705	3-TR9	SK-358074B	8-3B	ZW-273914	7-4x
EC-334071	3-C48	ET-349979	6-TR1	SK-358074C	8-4	ZW-340648	8-11x
EC-338411	5-C1B	ET-353316	3-TR7	SK-358074D	8-4B	ZW-698308	7-5x
EC-345817	3-C14	EV-356582	3-VR6	SK-358074E	8-5	ZW-716289	1-47
EC-347228	3-C15	EV-356583	3-VR5	SK-358074F	8-5B	ZW-716290	1-48
EC-516723	3-C50	EV-357619	3-VR3	SK-358076A	8-6	ZW-716292	1-50
ED-301911	3-D6	EV-358082	3-VR1	SK-358076B	8-6B	ZW-716296	1-54
ED-301911	3-D7	EV-358829	3-VR2	SK-358076C	8-7	ZW-716298	1-55
ED-301911	3-D8	EV-358829	3-VR4	SK-358076D	8-7B	ZW-716301	1-58
ED-310387	3-D3	EW-344151	7-15x	SK-358076E	8-8	ZW-716303	1-60
ED-331198	3-D9	EW-347607	7-10B	SK-358076F	8-8B		
ED-349617	4-D6	EW-347680	7-10D	SK-358474C	8-13B		
ED-349662	3-D1	EW-347681	7-10E	SK-358474D	8-13		
ED-349662	3-D2	EW-347682	7-10C	SP-358061A	8-20		
ED-349662	3-D4	EW-347683	7-10A	SP-358061B	8-20B		
ED-349662	3-D5	EZ-200473	6-1	SP-358073G	7-13A		
ED-351881	4-D4	HE-337047	1-H902	SP-358073H	7-13B		
ED-351881	4-D5	HR-358778	1-H901	SP-358073J	7-13C		
ED-358085	4-D1	HZ-716270	1-30	SP-358073K	7-13D		
ED-358085	4-D2	MB-358071	7-8	SP-358073L	7-13E		
ED-358085	4-D3	MB-716266	1-26	SP-358073M	7-13F		
ED-358087	4-D7	MB-716282	1-41	SZ-358510	1-69		
EF-341264	3-F1B	MB-716283	1-42	TC-358065	7-6		
EF-359007	3-F1C	MB-716288	1-46	TC-358068	8-14		
EF-602550	3-F1A	MC-358780	7-7	TC-358081	7-9		
EH-354528	3-FL1	MI-716240	1-5	TC-716237	1-2		
EI-337228	3-IC3	MI-716309	1-65	TC-716267	1-27		
EI-349590	3-IC1	ML-716273	1-33	TC-716269	1-29		
EI-353289	4-IC1	ML-716274	1-34	ZG-358078	8-10x		
EI-355595	3-IC2	ML-716276	1-35	ZG-716241	1-6		
EJ-347664	3-J3	ML-716277	1-36	ZG-716243	1-7		
EJ-355012	3-J2	ML-716278	1-37	ZG-716244	1-8		
EJ-357732	3-J1	ML-716279	1-38	ZG-716245	1-9		
EJ-358083	3-J4	ML-716280	1-39	ZG-716246	1-10		
EO-315758	3-FL3	ML-716305	1-62	ZG-716247	1-11		
EO-337044	3-FL2	ML-716306	1-63	ZG-716248	1-12		
EO-347162	4-FL1	ML-716311	1-66	ZG-716249	1-13		
EO-353311	3-T1	MS-716291	1-49	ZG-716250	1-14		

AKAI MODEL HX-A201

PC BOARDS SCHEMATIC DIAGRAM

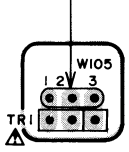






PRE AMP PCB T2079A501A U,E,V,B,S

502A C,A



TR PCB
T2079A501D U,E,V,B,S

502D C,A

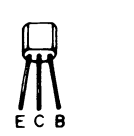
LOCATION OF COMPONENTS

TRs
TR1.....C4
TR2,3.....E3
TR4.....B4
TR5,5b.....B3
TR6.....E3
TR6b.....E2
TR7.....C4
TR8 to 11.....B4
TR12.....A1
TR12b.....D1
TR13.....B3
TR13b.....D3
TR14.....A1
TR14b.....D1
TR15,15b.....E1

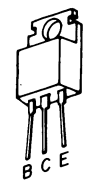
ICs
IC1.....C1
IC2.....B2
IC2b.....D2
IC3.....E4

TERMINALS
WW103.....D3
WW104.....B3
P101.....C4
P102.....B4
P103.....A4
P104.....D4
P105.....D3
P106,107.....C2

TR1,5,6.....2SC3383(T,U)
TR2,4,8.....2SC2320(E,F)
TR3.....2SB774(R,S)
TR7.....2SD313(D,F)
TR9.....2SC2320(F,G)
TR10,11.....2SC2274(E,F)
TR12,13,14....2SC3383(S,T)
TR15.....2SC1843(E,F)



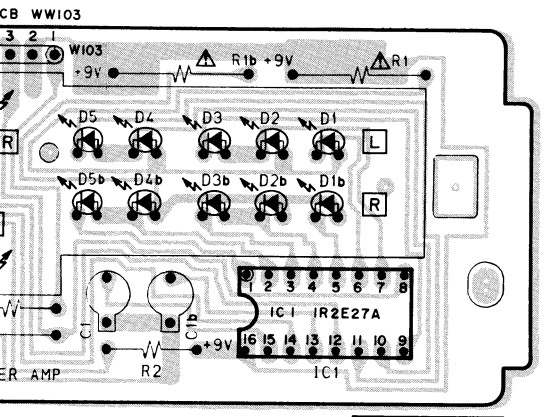
2SB774
2SC1843
2SC2274
2SC2320
2SC3383



2SD313

B = NPN TRANSISTOR

B = PNP TRANSISTOR

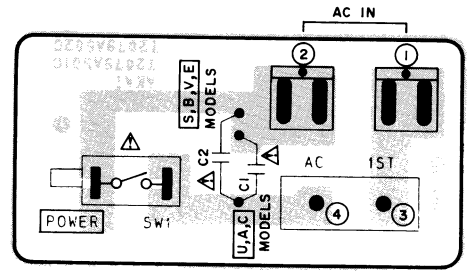


ETER PCB T2079A501B U,E,V,B,S

502B C,A

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

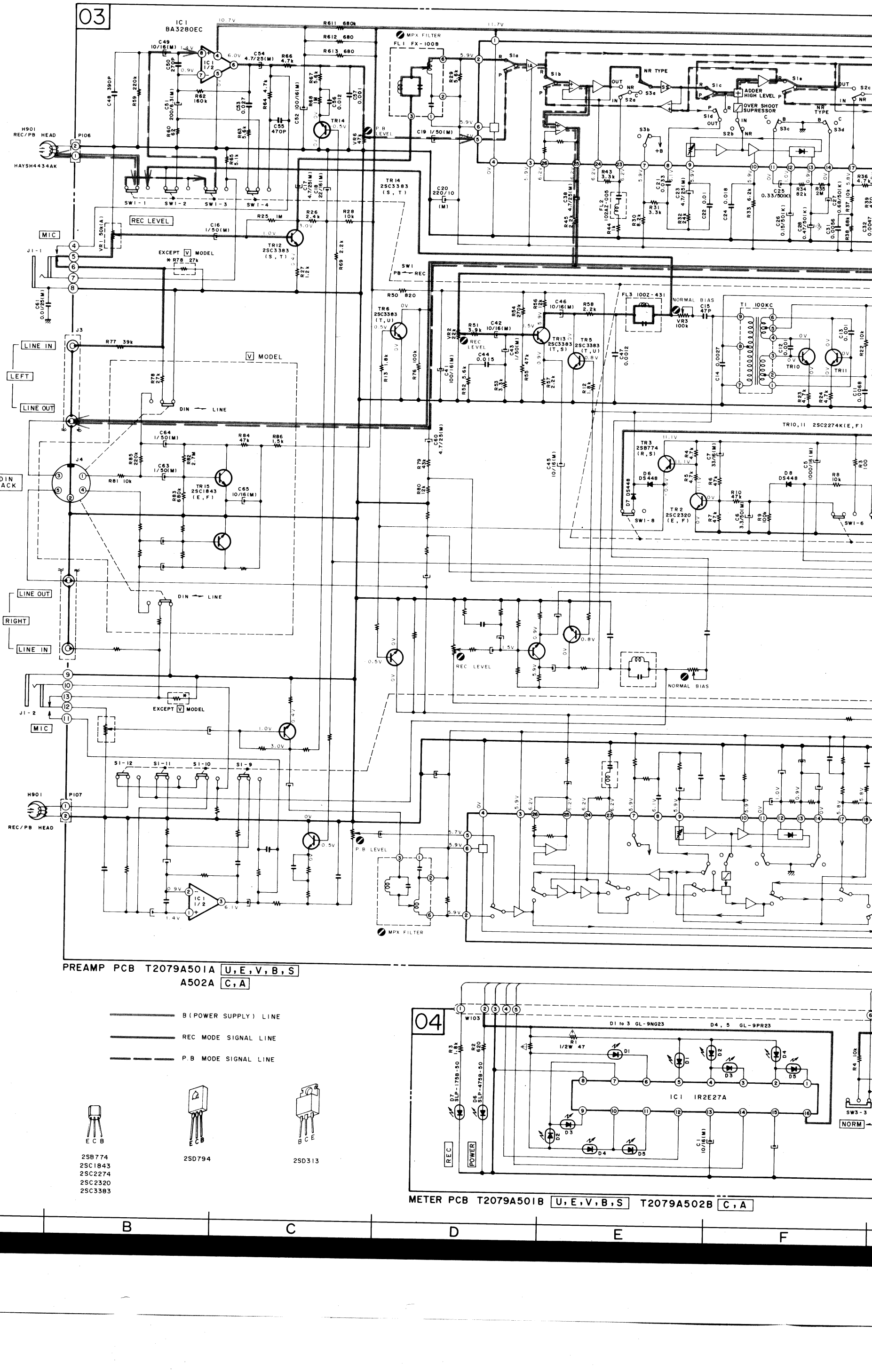
AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT



POWER SW PCB
T2079A501C U,E,V,B,S

502C C,A

HX-A201



PREAMP PCB T2079A501A U,E,V,B,S
A502A C,A

B (POWER SUPPLY) LINE
REC MODE SIGNAL LINE
P.B MODE SIGNAL LINE

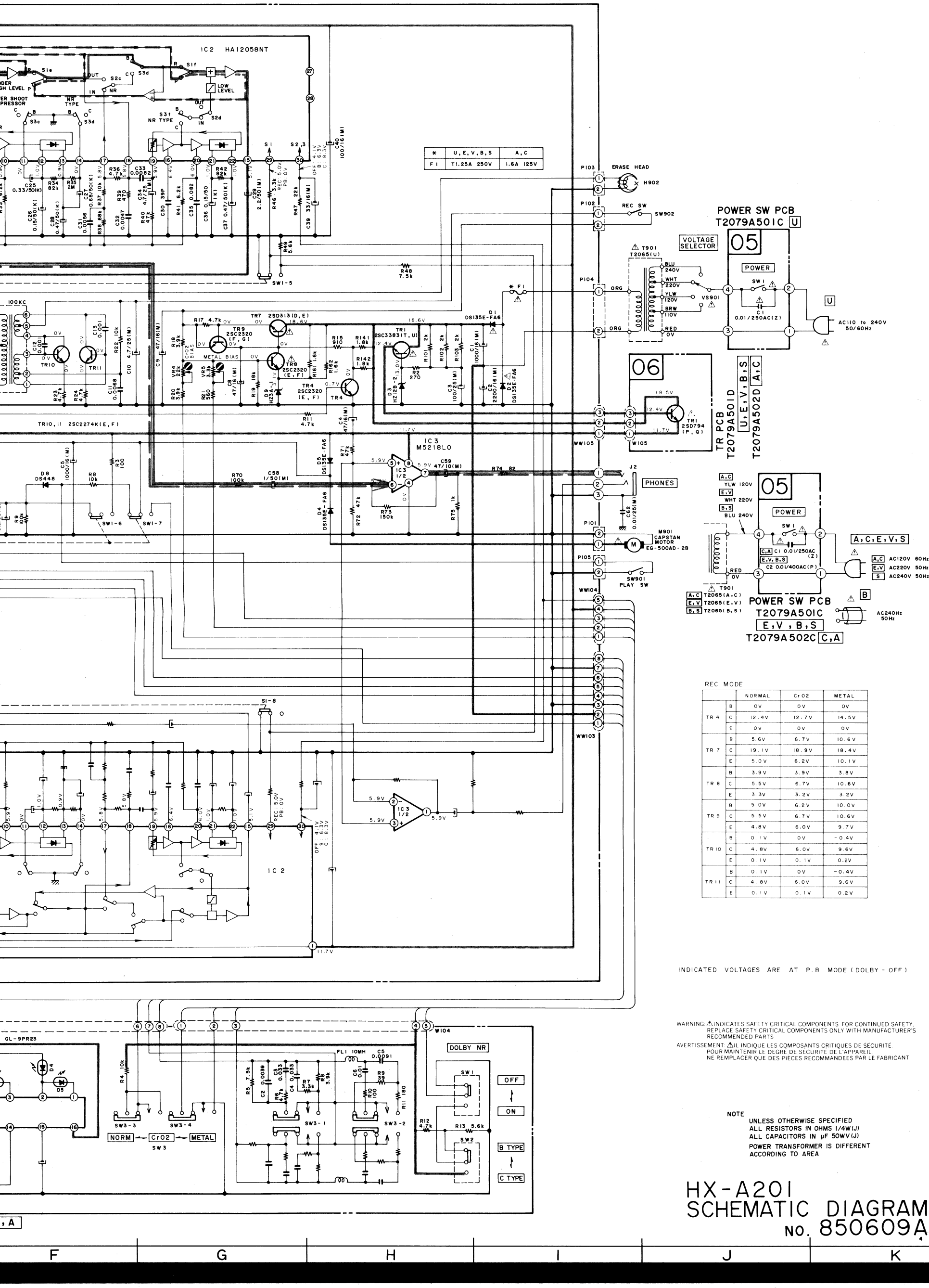
2SB774
2SC1843
2SC2274
2SC2320
2SC3383

2SD794

2SD313

METER PCB T2079A501B U,E,V,B,S T2079A502B C,A

001740



*	U, E, V, B, S	A, C
F1	T1.25A 250V	1.6A 125V

REC MODE

		NORMAL	CrO2	METAL
TR4	B	0V	0V	0V
	C	12.4V	12.7V	14.5V
	E	0V	0V	0V
TR7	B	5.6V	6.7V	10.6V
	C	19.1V	18.9V	18.4V
	E	5.0V	6.2V	10.1V
TR8	B	3.9V	3.9V	3.8V
	C	5.5V	6.7V	10.6V
	E	3.3V	3.2V	3.2V
TR9	B	5.0V	6.2V	10.0V
	C	5.5V	6.7V	10.6V
	E	4.8V	6.0V	9.7V
TR10	B	0.1V	0V	-0.4V
	C	4.8V	6.0V	9.6V
	E	0.1V	0.1V	0.2V
TR11	B	0.1V	0V	-0.4V
	C	4.8V	6.0V	9.6V
	E	0.1V	0.1V	0.2V

INDICATED VOLTAGES ARE AT P.B MODE (DOLBY - OFF)

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SECURITE. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL, NE REMPLACER QUE DES PIECES RECOMMANDEES PAR LE FABRICANT

NOTE

UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W(J)
ALL CAPACITORS IN μF 50WV(J)
POWER TRANSFORMER IS DIFFERENT ACCORDING TO AREA

HX-A201
SCHEMATIC DIAGRAM
NO. 850609A